



Everyone can appreciate the humor of lasers in the first *Austin Powers* movie:

Dr. Evil: *OK, no problem. Here's my plan. Back in the '60s, I had a weather-changing machine that was, in essence, a sophisticated heat beam which we called a "laser." Using these "lasers," we punch a hole in the protective layer around the Earth which we scientists call the "Ozone Layer." Slowly but surely, ultraviolet rays would pour in, increasing the risk of skin cancer. That is unless the world pays us a hefty ransom.*

Or:

Dr. Evil: *Are those sharks with laser beams attached to their heads?*

Scott Evil: *[nods]*

Dr. Evil: *Cool! You mean that I actually have frickin' sharks with frickin' laser beams attached to their frickin' heads?*

But in real life, lasers are no laughing matter! Lasers are becoming an increasing problem for the LAPD. Air Support is our eye in the sky, lending ground troops a huge tactical advantage. But recently, an increase in laser pointing has added a new danger — one not yet recognized as an immediate threat or danger — to them and their eyesight: the high-power laser pointer. Suspects are shining lasers at helicopter cockpits, illuminating the aircraft and potentially causing permanent eye damage.

The Federal Aviation Administration says there were nearly 3,000 incidents last year in which people pointed lasers at planes and helicopters. The rise in incidents has coincided with a growing hobbyist market for handheld lasers that are far more powerful — and dangerous — than the typical laser pointer.



Historically, laser pointers have been utilized for the purpose of giving presentations. These were small, handheld devices mass produced at relatively low costs. The pointers were limited in power; at approximately five milliwatts, they were powerful enough to produce a visible laser spot indoors, yet fairly safe.

As technology goes, they figured out how to produce high-power lasers to be fitted to the same small, affordable handheld device. These devices can look like pens or small flashlights. They can emit a red, green or blue light with a much brighter laser spot. These new lasers often emit as much as 50 to 1,000 milliwatts of power; this output is 10 to 200 times the amount needed for safe use as an ordinary pointer.



The Laser Institute states that a laser emitting 50 milliwatts or more can immediately cause injury upon exposure, permanently affecting eyesight. A 200-milliwatt laser, even from 100 yards away, can cause permanent damage in less than one-tenth of a second. That's less time than it takes a human being to blink!

There is an active debate about what should be done. Is the solution education, regulation or prohibition of this type of handheld laser device?

Lasers with these power-output levels have been around for decades. Due to their cost, size and complexity, they have long been limited to research, industrial, entertainment and medical applications. In these settings, administrative controls limit access to the laser and safety training can be provided to users. However, in the public sector, these controls and precautions are not being used.

Back in 1999, the Los Angeles Police Protective League sponsored Assembly Bill 221, making it a crime to aim a laser pointer at a police officer. And since that time, numerous arrests have been made.

In the latest laser incident, Clark Gable III was arrested for allegedly shining a laser pointer at an LAPD helicopter. The 22-year-old actor and grandson of the Hollywood movie legend was only pointing the laser at the famous Hollywood sign and may have accidentally hit the helicopter. Gable was booked on 247.5 PC (felony), with his bail set at \$60,000.

Dozens of people in the United States and around the world have been arrested for pointing lasers at aircraft cockpits, most often near airports during takeoffs and landings — the most critical phases of flight, when pilots need to be the most alert and focused.

In 2011, LAPD has had approximately 14 cockpit illuminations, with approximately half of these resulting in arrests. With the help of special laser-filter glasses, as well as officers on the ground, pilots will be able to pinpoint the locations of these laser culprits and more will go to jail.

Stronger legislation to deal with the rise of laser incidents will be one of the goals of the Los Angeles Police Protective League for the 2012 legislative session. Stay safe and stay tuned!

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